Lab 4 - Driving LEDs at different rates

Friday, March 27, 2020 11:39 AM

Part 1

Timer 1 - provides 2Hz signal

1. Use an integer to count interrupts

raw_counts	(timer 1 interrupts)(2Hz)
Toggle LED 1	

2. We use out 2Hz drive the other LEDs

If((raw_count %2)==0)		// 1 Hz
increment one_sec count write to led_count		

If((raw_count%8)==0)

increment four_sec_count toggle LED 4		// for info only

Part 2

1. Use timer 1 to generate the 2Hz interrupt
   This will drive our count
   Our count will increment or decrement, depending on direction
   Direction will change every 10 sec

   We will drive LED 4 through LED 1

   We have to decide where to implement the count.
   We can implement in the ISR, or in the main program.